

NONREIMBURSABLE INTERAGENCY AGREEMENT
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND
UNITED STATES DEPARTMENT OF COMMERCE – NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION – NATIONAL OCEAN SERVICE –
NATIONAL GEODETIC SURVEY
FOR
COORDINATION OF MAINTENANCE AND OPERATION OF CONTINUOUSLY
OPERATING REFERENCE STATIONS TOWARD AN IMPROVED NATIONAL
REFERENCE FRAME

ARTICLE 1. PARTIES AND AUTHORITIES

The National Aeronautics and Space Administration, located at 300 E Street SW, Washington, DC 20546 (hereinafter referred to as "NASA") enters into this Interagency Agreement (hereinafter referred to as "IAA") in accordance with 51 U.S.C. § 20113(e). United States Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, National Geodetic Survey, located at 1315 East-West Hwy, Silver Spring, MD 20910-3282 (hereinafter referred to as "NOAA"), enters into this IAA in accordance with:

1. The Coast and Geodetic Survey Act, 33 U.S.C. §§ 883a *et seq.* which authorizes the Department of Commerce to conduct geodetic control surveys; developmental work for the improvement of surveying and cartographic methods, instruments, and equipment; and investigations and research in geophysical sciences, including geodesy and seismology. The act further authorizes the Secretary of Commerce to "collect, correlate, and disseminate" geomagnetic data from domestic and foreign sources;
2. The Hydrographic Services Improvement Act of 1998, 33 U.S.C. §§ 892 *et seq.*, directs NOAA to manage, maintain, interpret, certify, and disseminate geodetic information. It further authorizes NOAA to "procure, lease . . . and operate vessels, equipment, and technologies necessary to ensure safe navigation and maintain operational expertise in [geodetic data acquisition and the management, maintenance, interpretation, certification and dissemination of geodetic information]"; and
3. The Office of Management and Budget (OMB) Circular No. A-16 Revised, August 19, 2002, Coordination of Geographic Information and Related Spatial Data Activities, which provides direction for federal agencies that produce, maintain or use spatial data either directly or indirectly in the fulfillment of their mission. The Circular establishes the Federal Geographic Data Committee, and assigns NOAA as the Federal Geodetic Control theme lead (and subcommittee chair), and identifies the (NOAA-managed) National Spatial Reference System as the fundamental geodetic control for the United States.

NASA and NOAA may be individually referred to as a "Party" and collectively referred to as "the Parties."

ARTICLE 2. PURPOSE

1. This IAA provides a framework for the Parties to improve the existing cooperative Continuously Operating Reference Stations (CORS) partnership and enhance the sharing of existing public data. The improvements include systematized interagency communication and consistent maintenance and operation of federally-controlled networks of high-quality CORS (hereinafter referred to as "Foundation CORS") and their geodetic control monuments in the United States and its territories, to support three-dimensional positioning for geodetic control and related science and space geodesy objectives. The network will use the Global Navigation Satellite System (GNSS) and will ensure a sufficient density of operating Foundation CORS throughout the United States, improving local ties and thereby each station's contribution to the International Terrestrial Reference Frame (ITRF).
2. This IAA will:
 - A. Lead to improvements in the US contribution to the ITRF, which will in turn improve the National Spatial Reference System (NSRS) and geolocation of Earth science observations.
 - B. Designate a subset of NASA GNSS stations as critical to the NOAA mission and as key contributors to accessing a next-generation national reference frame.
 - C. Codify coordination mechanisms for the operation and maintenance of installations that the Parties can use to meet both NASA science and NOAA/National Geodetic Survey (NGS) geodetic objectives.

ARTICLE 3. RESPONSIBILITIES

1. NASA will use reasonable efforts to:
 1. Make available, in a manner agreed to by both Parties, raw GNSS observations from identified Foundation CORS to NOAA/NGS.
 2. Facilitate NOAA/NGS physical access to identified Foundation CORS and established monumentation (i.e., the structure upon which the system is installed) for survey purposes or interoperability of parallel efforts, and installation or maintenance of co-located NOAA equipment.
 3. Provide a NASA point-of-contact (POC) for communications including, but not limited to, advance notice of any changes to hardware or receiver configuration making up the NASA-contributed Foundation CORS.
 4. When any changes are made to the Foundation CORS, within 10 business days, provide all metadata of the changes to NGS, including but not limited to these possible metadata:
 - A. digital photographs of the station and equipment as described in the CORS guideline Section E.1
(https://www.ngs.noaa.gov/PUBS_LIB/CORS_guidelines.pdf, published May 2018);

- B. receiver manufacturer/model;
 - C. receiver serial number;
 - D. receiver firmware version;
 - E. antenna model and serial number;
 - F. antenna radome type;
 - G. antenna/receiver cable changes; and
 - H. any changes in the environment surrounding the site (e.g., new construction near the antennas).
5. Ensure that the identified Foundation CORS are consistently maintained to International GNSS Service (IGS) standards, including troubleshooting any problems as a matter of urgency and making reasonable efforts to isolate and correct the problems.

B. NOAA will use reasonable efforts to:

1. As part of the NGS CORS program, collect and archive GNSS data from the Foundation CORS owned by NASA at sampling rate no less than 1 second interval.
2. Provide access to the aforementioned GNSS data to the public free of charge.
3. Provide a NOAA/NGS POC for communications including, but not limited to, any issues or concerns regarding NASA-operated CORS sites participating in the Foundation CORS grouping of stations.
4. When new metadata is received by NOAA/NGS from NASA, update that metadata and make it available to the public. In addition, subscribe to and monitor IGS email messages for change and outage notifications and make those updates available to the public.
5. Perform regular (approximately every 5 years) site surveys to the International Earth Rotation Service (IERS) standard, establishing local tie vector information for all co-located geodetic technique instruments at all Foundation CORS sites.

ARTICLE 4. SCHEDULE AND MILESTONES

The planned major milestones for the activities defined in Article 3 are as follows:

Milestone 1: Identify Agency points-of-contact	12/2/2019
Milestone 2: Iterate on list of participating sites	1/3/2020
Milestone 3: Commence NASA site data inclusion in Foundation-CORS NOAA/NGS operations	3/2/2020

ARTICLE 5. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this IAA and each Party will fund its own participation. All activities under or pursuant to this IAA are subject to the availability of funds, and no provision of this IAA shall be interpreted to require

obligation or payment of funds in violation of the Anti-Deficiency Act (31 U.S.C. § 1341).

ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this IAA is estimated based upon the Parties' current understanding of the projected availability of its respective goods, services, facilities, or equipment. In the event that either Party's projected availability changes, NASA or NOAA, respectively, shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's and NOAA's use of its own goods, services, facilities, or equipment shall have priority over the use planned in this IAA.

ARTICLE 7. LIABILITY AND RISK OF LOSS

Each Party agrees to assume liability for its own risks arising from or related to activities conducted under this IAA.

ARTICLE 8. INTELLECTUAL PROPERTY RIGHTS: DATA RIGHTS

NASA and NOAA agree that the information and data exchanged in furtherance of the activities under this IAA will be exchanged without use and disclosure restrictions unless required by national security regulations (e.g., classified information) or as otherwise provided in this IAA or agreed to by NASA and other Federal Agencies for specifically identified information or data (e.g., information or data specifically marked with a restrictive notice).

ARTICLE 9. INTELLECTUAL PROPERTY RIGHTS: HANDLING OF DATA

- A. In the performance of this Agreement, NASA or NOAA (as "Disclosing Party") may provide the other Party (as "Receiving Party") with:
 - 1. data of third parties that the Disclosing Party has agreed to handle under protective arrangements or is required to protect under the Trade Secrets Act (18 U.S.C. § 1905) ("Third Party Proprietary Data"), or
 - 2. Government data, including software, the use and dissemination of which, the Disclosing Party intends to control ("Controlled Government Data").
- B. All Third Party Proprietary Data and Controlled Government Data provided by Disclosing Party to Receiving Party shall be marked by Disclosing Party with a restrictive notice and protected by Receiving Party in accordance with this Article.
- C. Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data.
 - 1. Third Party Proprietary Data:

The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.

2. Controlled Government Data:

The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.

3. NASA software and related Data will be provided to Partner under a separate Software Usage Agreement (SUA). NOAA shall use and protect the related data in accordance with this Article:

List the name NASA case number of any Government software that NASA will provide to Partner to perform the Agreement.

D. For Data with a restrictive notice and Data identified in this Agreement or an accompanying funding document, Receiving Party shall:

1. Use, disclose, or reproduce the Data only as necessary under this Agreement;
2. Safeguard the Data from unauthorized use and disclosure;
3. Allow access to the Data only to its employees and any Related Entity requiring access under this Agreement;
4. Except as otherwise indicated in D.3., preclude disclosure outside Receiving Party's organization;
5. Notify its employees with access about their obligations under this Article and ensure their compliance, and notify any Related Entity with access about their obligations under this Article; and
6. Dispose of the Data as Disclosing Party directs.

E. If the Parties exchange Data having a notice deemed ambiguous or unauthorized by the receiving Party, it should tell the providing Party. If the notice indicates a restriction, the receiving Party must protect the Data under this Article unless otherwise directed in writing by the providing Party.

F. Notwithstanding any restrictions provided in this Article, the Parties are not restricted in the use, disclosure, or reproduction of Data provided under this Agreement that is:

1. known or available from other sources without restriction;
2. known, possessed, or developed independently, and without reference to the Proprietary Data;
3. made available by the owners to others without restriction; or
4. required by law or court order to be disclosed.

If a Party believes that any exceptions apply, it shall notify the other Party before any unrestricted use, disclosure, or reproduction of the Data.

ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS: INVENTION AND PATENT RIGHTS

Unless otherwise agreed upon by NASA and NOAA, custody and administration of inventions made (conceived or first actually reduced to practice) under this IAA will remain with the respective inventing Party. In the event an invention is made jointly by

employees of the Parties (including by employees of a Party's contractors or subcontractors for which the U.S. Government has ownership), the Parties will consult and agree as to future actions toward establishment of patent protection for the invention.

ARTICLE 11. RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or NOAA may, consistent with Federal law and this Agreement, release general information regarding its own participation in this IAA as desired. Insofar as participation of the other Party in this IAA is included in a public release, NASA and NOAA will seek to consult with each other prior to any such release, consistent with the Parties' respective policies.

Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that, if this IAA is entered into pursuant to NASA's 51 U.S.C. §20113(e) authority, this IAA will be disclosed, without redaction, in accordance with the NTAA.

ARTICLE 12. TERM OF AGREEMENT

This IAA becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or five years from the effective date, whichever comes first.

ARTICLE 13. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 14. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., "Liability and Risk of Loss" and "Intellectual Property Rights" and related clauses ["Financial Obligations" if reimbursable] shall survive such expiration or termination of this Agreement.

ARTICLE 15. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

Management Points of Contact

National Aeronautics and Space
Administration

Benjamin Phillips
Lead, Earth Surface and Interior Focus
Area
Mail Stop: 300 E Street SW,
Washington, DC 20024
300 E Street SW
Washington, DC 20546
Phone: 202-358-5693
ben.phillips@nasa.gov

United States Department of Commerce
National Oceanic and Atmospheric
Administration

Theresa Damiani
Chief, Spatial Reference System Division
Mail Suite: NOAA-NGS, SSMC3-8813,
Silver Spring MD 20910
1315 East-West Hwy
Silver Spring, MD 20910-3282
Phone: 240-533-9560
theresa.damiani@noaa.gov

ARTICLE 16. DISPUTE RESOLUTION

All disputes concerning questions of fact or law arising under this IAA shall be referred by the claimant in writing to the appropriate person identified in this IAA as the "Points of Contact." The persons identified as the "Points of Contact" for NASA and NOAA will consult and attempt to resolve all issues arising from the implementation of this IAA. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this IAA, or their designees, for joint resolution after the Parties have separately documented in writing clear reasons for the dispute. As applicable, disputes will be resolved pursuant to The Department of the Treasury's Intragovernmental Transaction Guide (Treasury Financial Manual, Vol. 1, Chapter 2, Part 4700, Appendix 10 (hereinafter, the "Intragovernmental Transaction Guide")).

ARTICLE 17. MODIFICATIONS

Any modification to this IAA shall be executed, in writing, and signed by an authorized representative of NASA and the NOAA.

ARTICLE 18. APPLICABLE LAW


U.S. Federal law governs this IAA for all purposes, including, but not limited to, determining the validity of the IAA, the meaning of its provisions, and the rights, obligations and remedies of the Parties.


ARTICLE 19. SIGNATORY AUTHORITY

Approved and authorized on behalf of each Party by:

NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION

UNITED STATES DEPARTMENT
OF COMMERCE
NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
NATIONAL GEODETIC SURVEY

BY: 
Sandra Cauffman
Director, Earth Science Division
(Acting)

BY: 
Juliana P. Blackwell
Director, NOAA National Geodetic
Survey

DATE: 12/18/2019

DATE: 11/25/2019